Mini Cutting Plotter

NODE 101/
Cutok

USER'S MANUAL

Thank you for purchasing cutter NODE 101 / Cutok. It can be used for cutting vinyl, heavy-cardstock, paper and sticker film as well as pen plotting. Please read this manual thoroughly and assure proper use of the equipment.

Warning

Only computers or peripherals (computer input/output devices, terminals, printers, etc.) certified as complying with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules, may be attached to this product when this product is operated in a residential environment. Operation with non-certified peripherals is likely to result in interference to radio and TV.

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Section 1 General Information

1.1 Introduction

Thank you for purchasing the NODE 101 mini cutting plotter. NODE 101 is a plotter and vinyl cutter that connects to your computer. It can also cut different kinds of paper including sign paper enabling you to quickly and easily cut professional custom design sign that you have created on your computer using our basic sign editing software. In order to make full use of this machine, please be sure to read through this user manual before commencing any work.

1.2 General Precautions

★Do not use damaged cord or plug.

★The top of blade should extend between 0.1—0.5mm, no less than 0.1 mm and no more than 0.5mm in order to work properly, If the blade extends too much, it will damage the layering and affect the quality of the cutting.

★Don’t move the tool carriage rapidly with hands.

★Don’t not expose the mini cutting plotter to direct sunlight

1.3 Package Contents

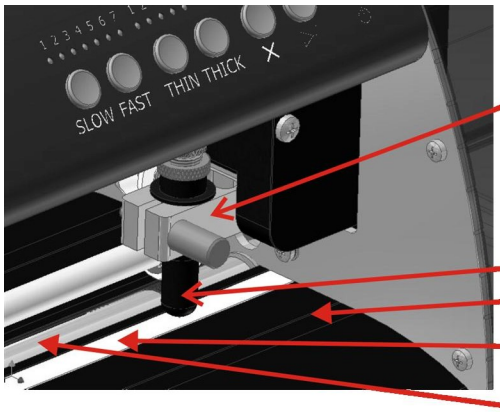
Check that the package contains the following items before using your mini cutting plotter .If any item is missing or damaged, please contact with vendor or distributor where the mini cutting plotter was purchased.

No.	Article	Quantity
1	AC adapter	1
2	AC adapter Power cable	1
3	Blade and Blade holder	1
4	Pen holder	1
5	USB cable	1
6	Software CD	1
7	Cutting Mat	2

1.4 Introduction of Components

Blade carriage
Drives the Blade assembly to the left or right

Pinch roller
White rollers that feed the media



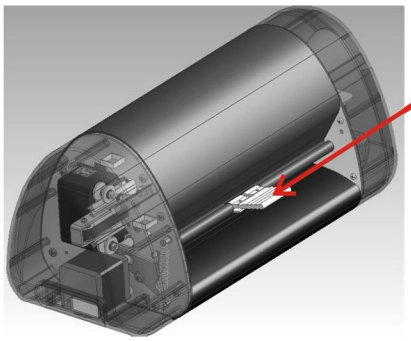
Clamp bracket
Holds the Blade assembly and drives it up or down

Blade assembly
Used for holding a blade

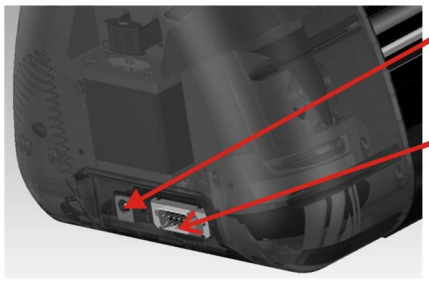
Guideline
Used as a guide when media is loaded

Cutting strip
Black strip that protects work surface from damage caused by the blade

Media roller
Prevents media from warping



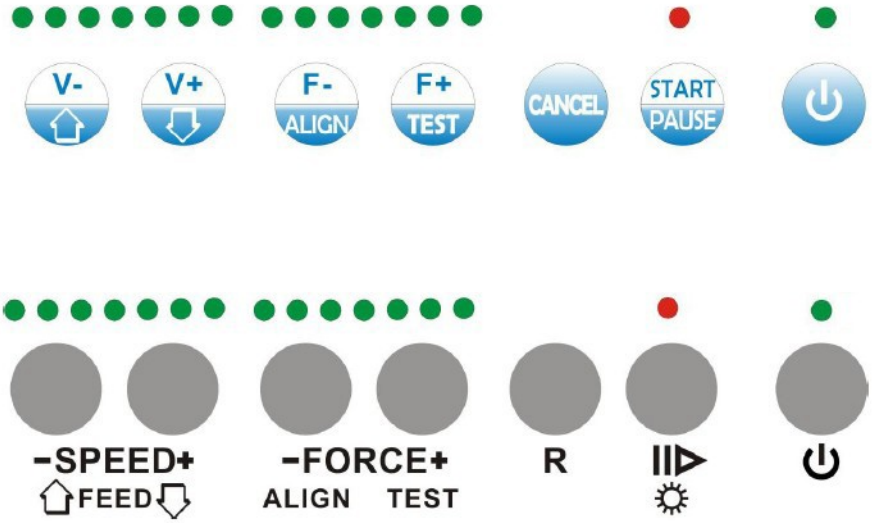
Pressure hold levers
Raise and lower the pressure rollers. Lowering the pressure rollers will hold the media in place

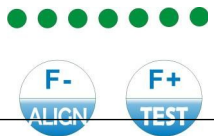
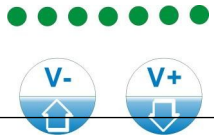


AC adapter jack
Used for connecting the cable for the AC/DC power adapter

USB interface connector
Used for connecting the USB cable

1.5 Control Panel



	Power on/off LED Standby switch Turns the cutter on and off
	STATUS LED OFF ON-LINE status = ready to receive data from host computer ON OFF-LINE status FLASHING Registration mark Status button
	Restart button
	FORCE control button F- = decreasing force on the tool F+= increasing force on the tool
	SPEED /Paper Move control button

Section 2 *Connection to the computer*

2.1 Installation of power adapter

The cutter uses a 16V/2.5A adapter.

Steps 1:

A. Plug power adapter into mini cutter.

B. Plug power lead from adapter to mains AC power. .

Steps 2:

A. Make sure the power is switched off.

B. Connect the USB cable supplied from the Mini cutter to your computer.

C. Turn on your computer and then turn on the Mini cutter. You should turn on the computer first then turn on the Mini cutter. The blade carriage will return to the original position.

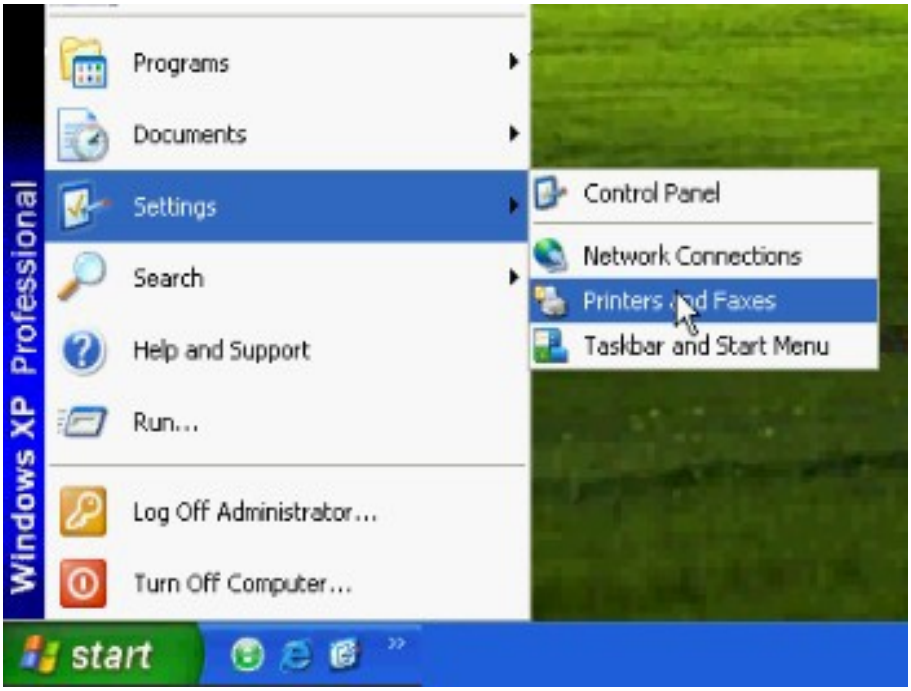
2.2 Setup of the driver and software

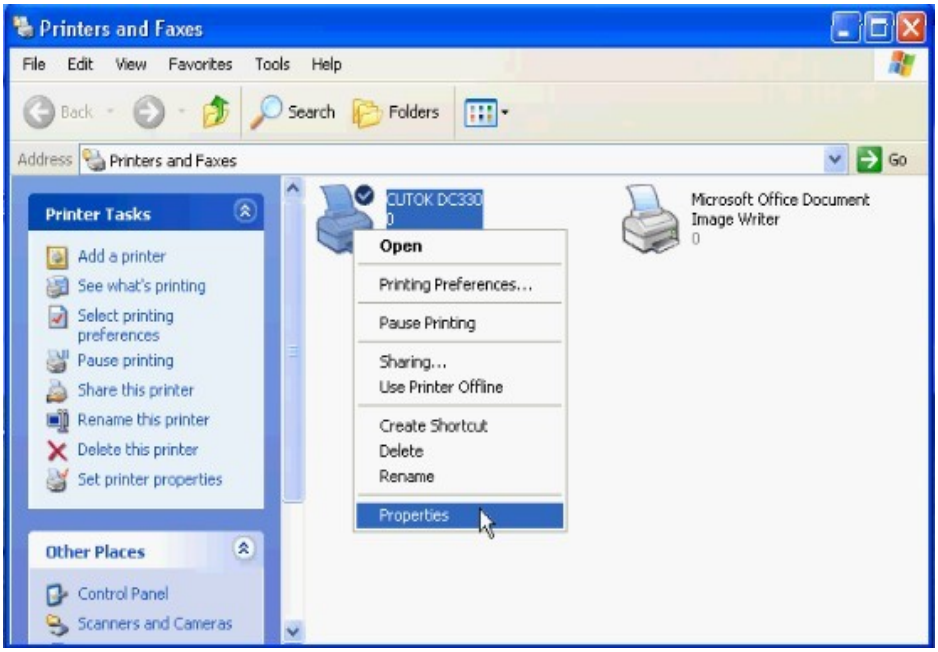
Steps 1: Install the driver and check the parameters

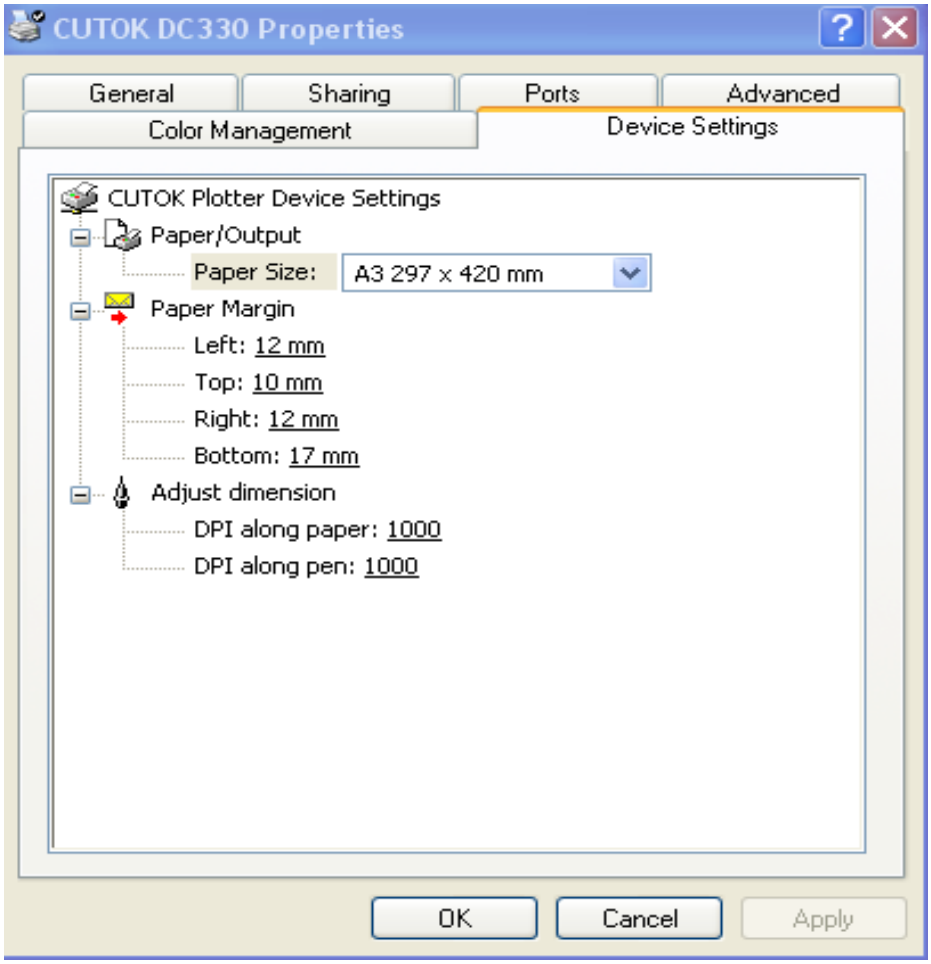
If using a USB port,turn on the computer first, and insert CD into the computer, then turn on the Mini cutter, t his program runs by itself and finish installing driver. After installation, wait about 15 seconds the plotter will as a windows device automatically add to the printer item.

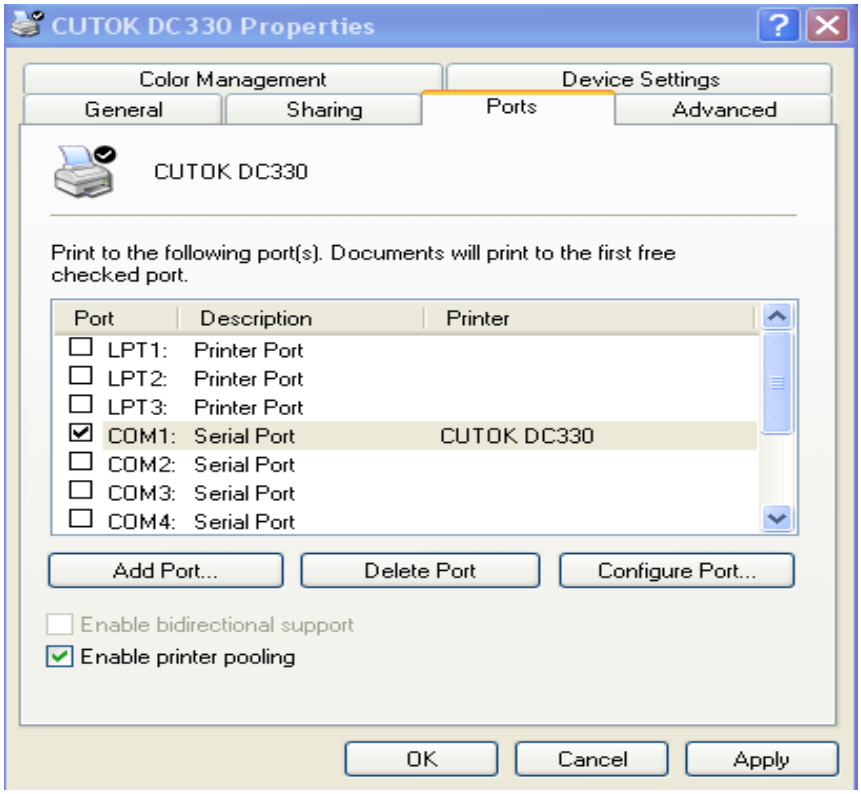
Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
CUTOKCUTOK_DC330
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
CUTOK DC330
Click Finish to close the wizard.
< Back
Finish
Cancel


Windows XP Professional
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off Administrator...
Turn Off Computer...
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu
start


Printers and Faxes
File Edit View Favorites Tools Help
Back Search Folders
Address Printers and Faxes
Go
Printer Tasks
Add a printer
See what's printing
Select printing preferences
Pause printing
Share this printer
Rename this printer
Delete this printer
Set printer properties
Other Places
Control Panel
Scanners and Cameras
CUTOK DC330
0
Open
Printing Preferences...
Pause Printing
Sharing...
Use Printer Offline
Create Shortcut
Delete
Rename
Properties
Microsoft Office Document Image Writer
0


CUTOK DC330 Properties
General
Sharing
Ports
Advanced
Color Management
Device Settings
CUTOK Plotter Device Settings
Paper/Output
Paper Size: A3 297 x 420 mm
Paper Margin
Left: 12 mm
Top: 10 mm
Right: 12 mm
Bottom: 17 mm
Adjust dimension
DPI along paper: 1000
DPI along pen: 1000
OK
Cancel
Apply



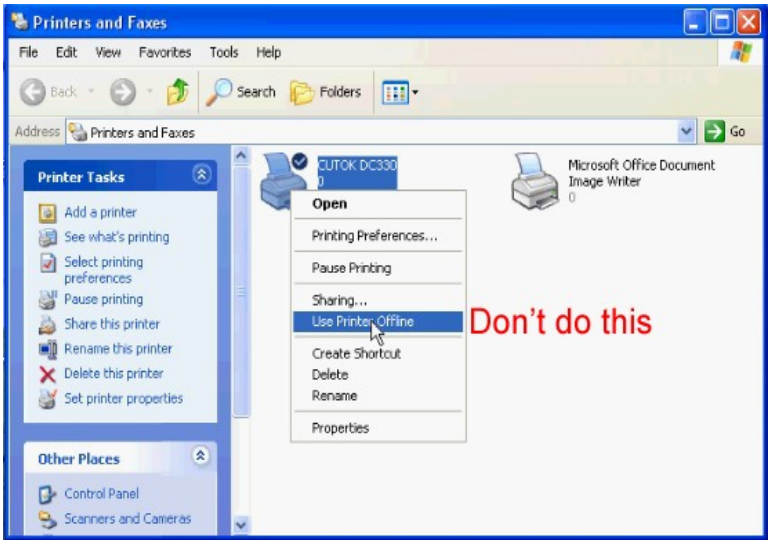
Notes:

NODE 101 / CUTOK with a "real" USB interface (not USB-serial and parallel), can achieve plug-and-pull,if pull (or shutdown) it the computer shows as offline,plug in (or start) the system automatically loads device and appears as online.

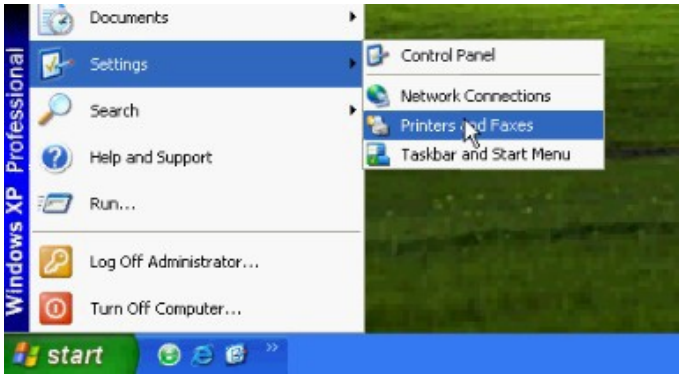
A. Before turn on the plotter,start the computer firstly.

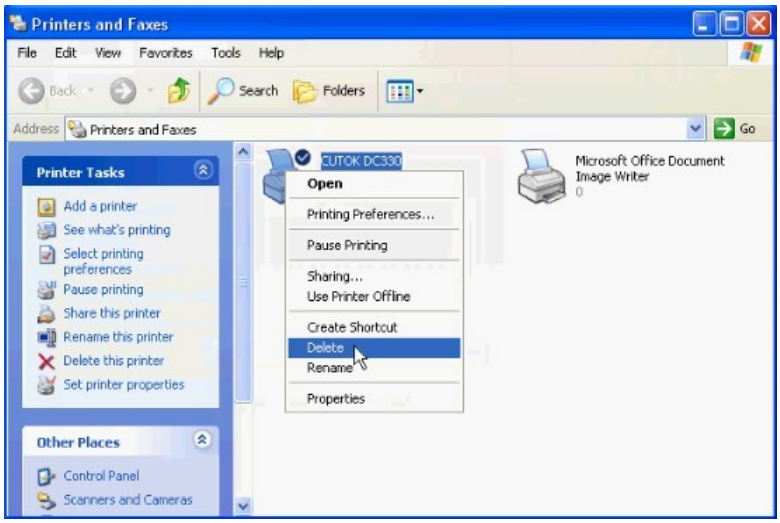
B. In working, to avoid switching on or off frequently the cutting plotter,and a short interval between switch on and off (plug and pull).

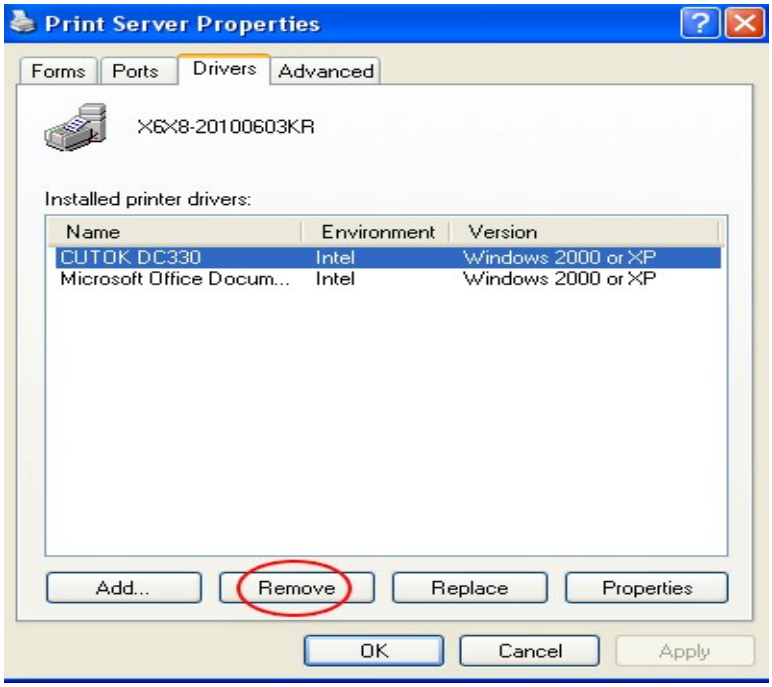
C. After turn on(plug) the plotter, wait 10 seconds, then send the data. You would better check the equipment is online before using.If offline, shut down or disconnect USB and start again later to automatically connect. Do not modify the properties in computer system.



D. If it can not be online in using, you can delete the printer. Then insert CD to re-install automatically. If you want to completely remove NODE 101 / CUTOK driver, you should follow these steps:





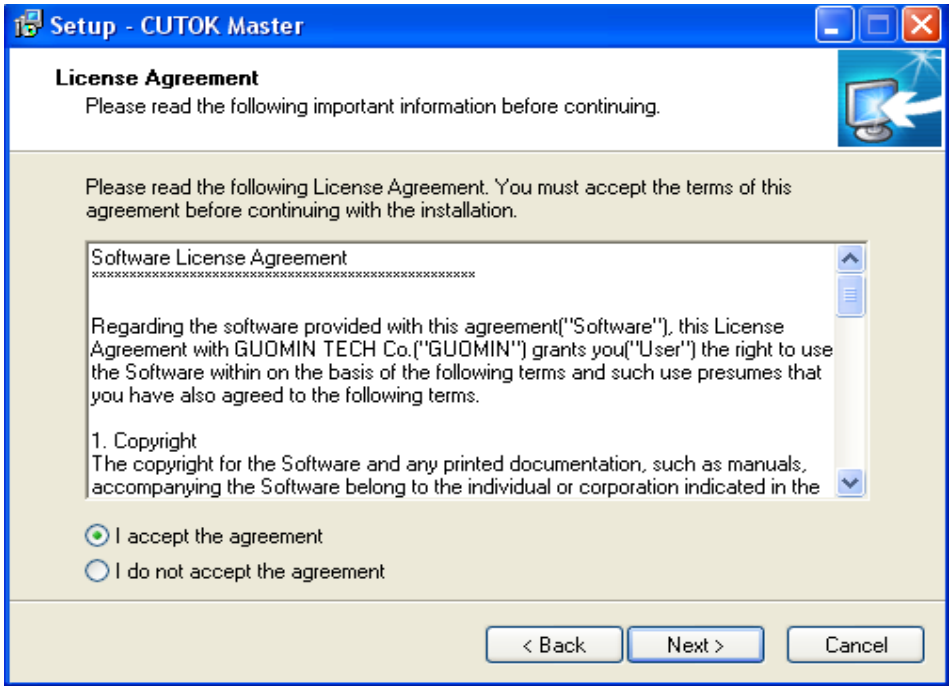


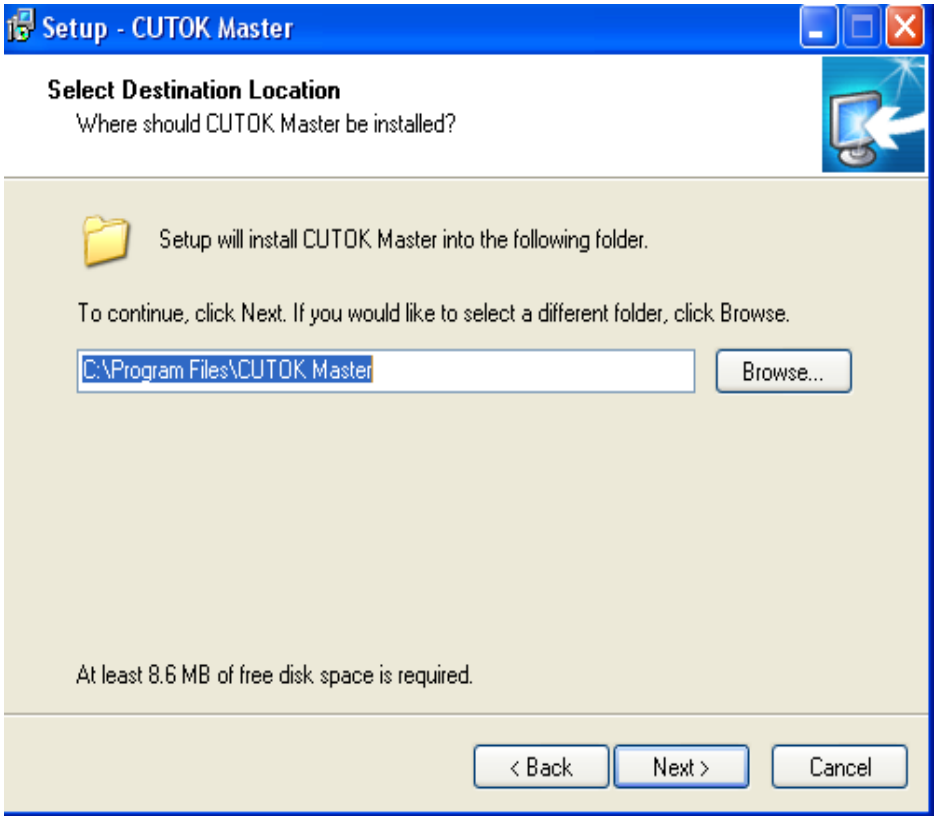
Steps 2: Install CUTOK Master and use it

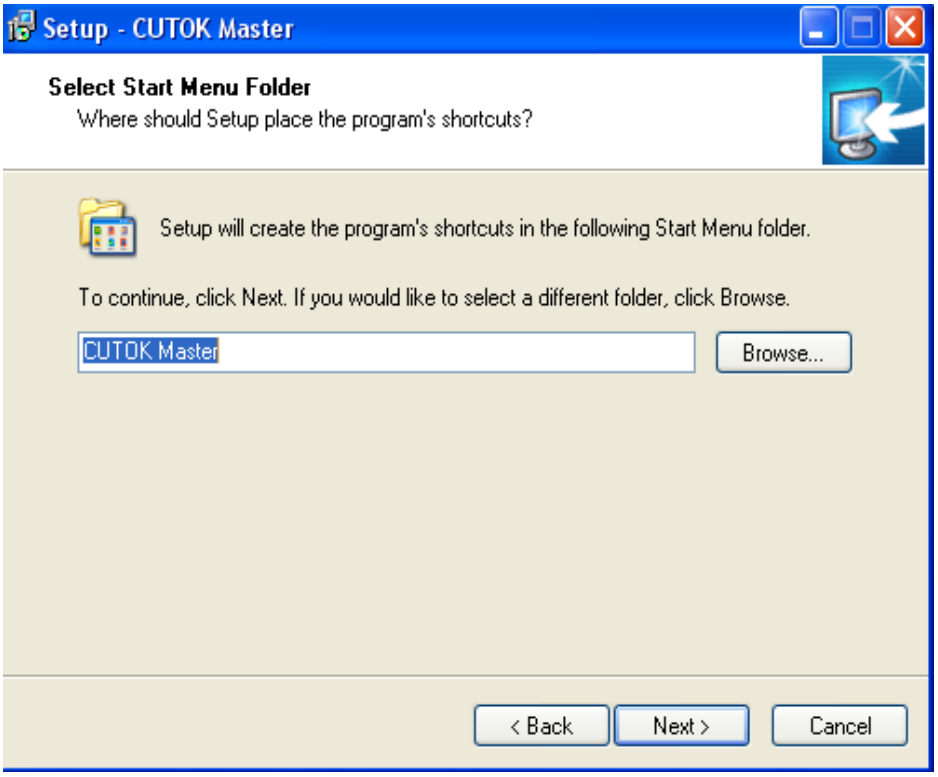
Click

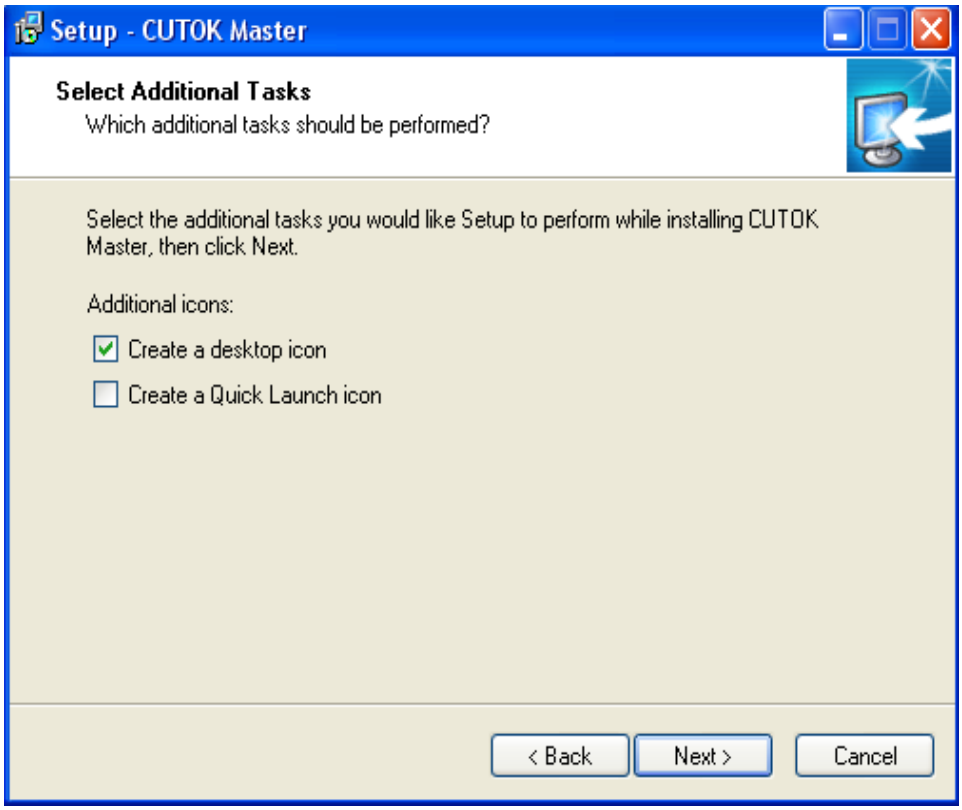
in CD to install the software.You can also edit pictures in other software, such as CorelDraw, Adobe Illustrator,etc. then send the data to NODE 101 / CUTOK plotter for cutting.

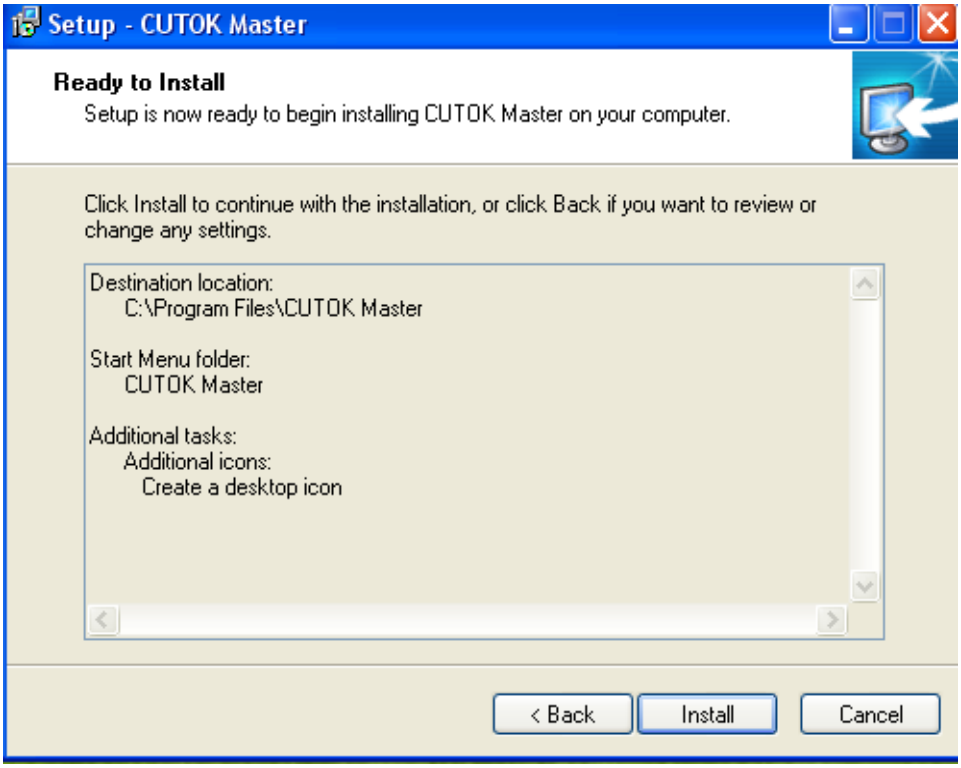
Setup - CUTOK Master
Welcome to the CUTOK Master Setup Wizard
This will install CUTOK Master 2.0 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel


Setup - CUTOK Master
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
Software License Agreement
Regarding the software provided with this agreement("Software"), this License Agreement with GUOMIN TECH Co.("GUOMIN") grants you("User") the right to use the Software within on the basis of the following terms and such use presumes that you have also agreed to the following terms.
1. Copyright
The copyright for the Software and any printed documentation, such as manuals, accompanying the Software belong to the individual or corporation indicated in the
I accept the agreement
I do not accept the agreement
< Back
Next >
Cancel

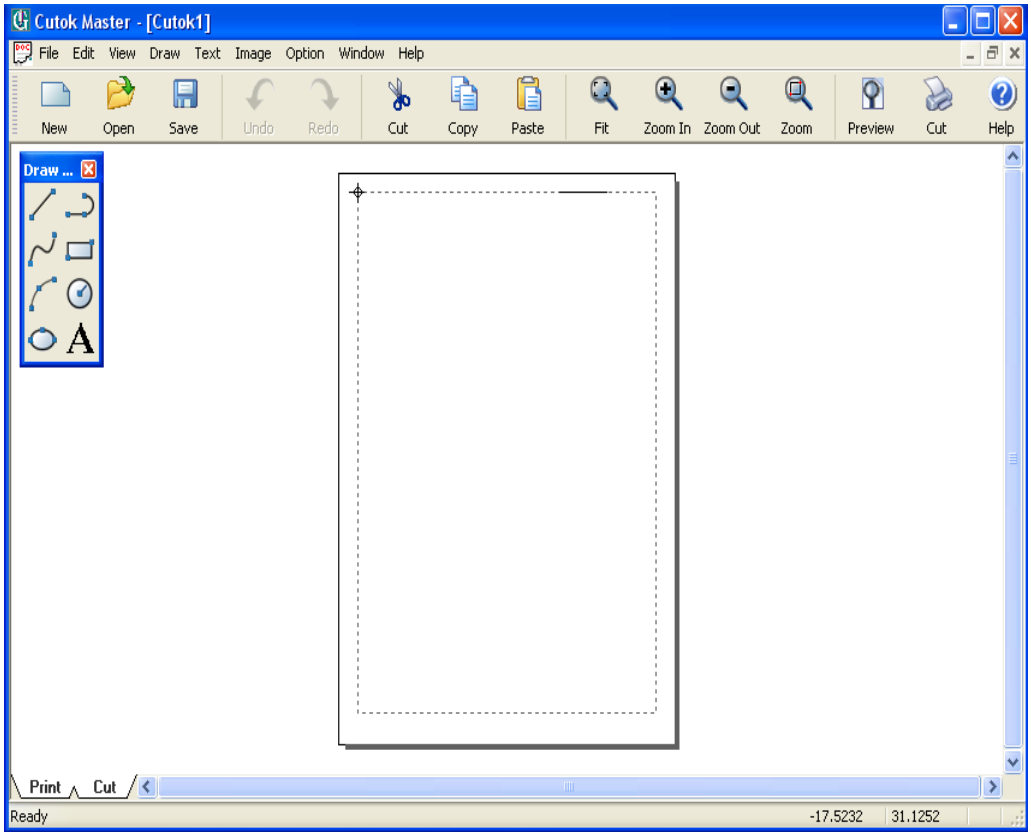

Setup - CUTOK Master
Select Destination Location
Where should CUTOK Master be installed?
Setup will install CUTOK Master into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\CUTOK Master
Browse...
At least 8.6 MB of free disk space is required.
< Back
Next >
Cancel

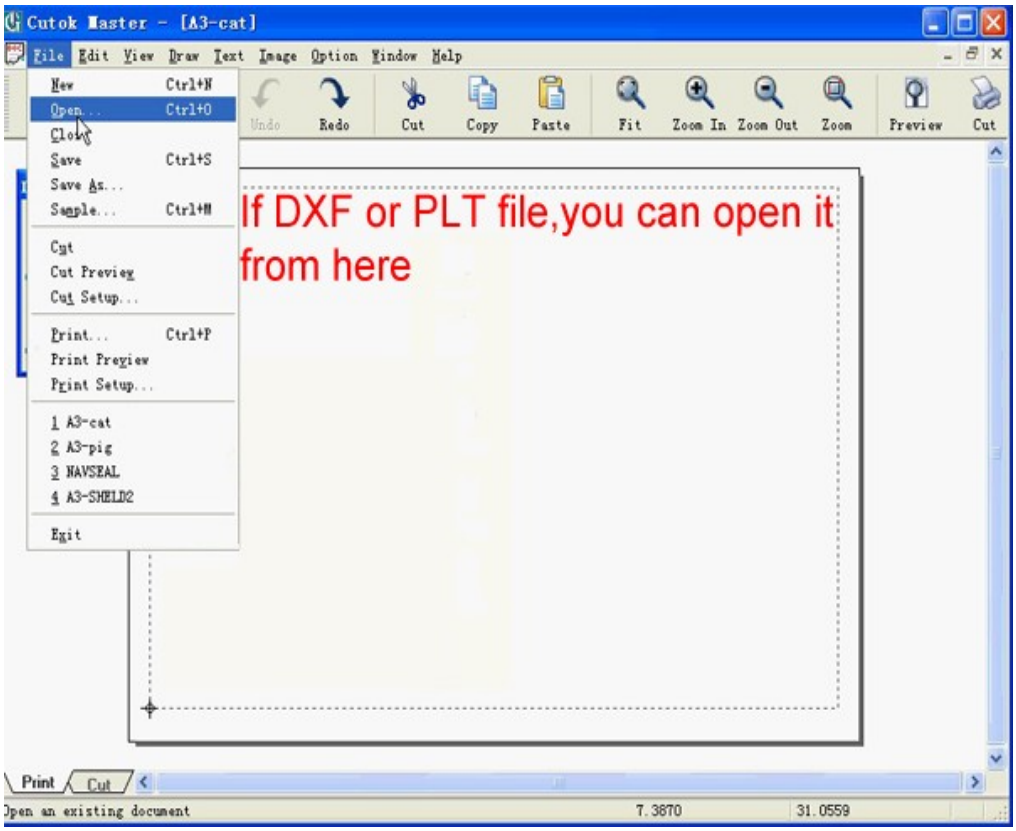

Setup - CUTOK Master
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
CUTOK Master
Browse...
< Back
Next >
Cancel

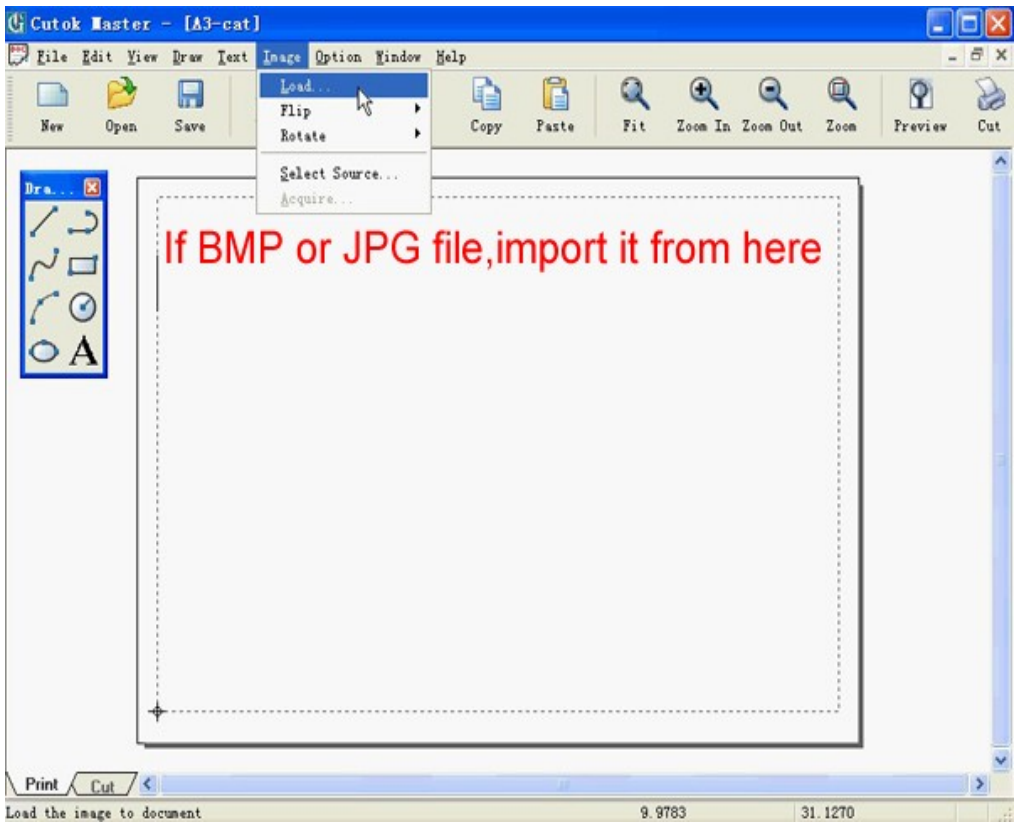

Setup - CUTOK Master
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing CUTOK Master, then click Next.
Additional icons:
Create a desktop icon
Create a Quick Launch icon
< Back
Next >
Cancel

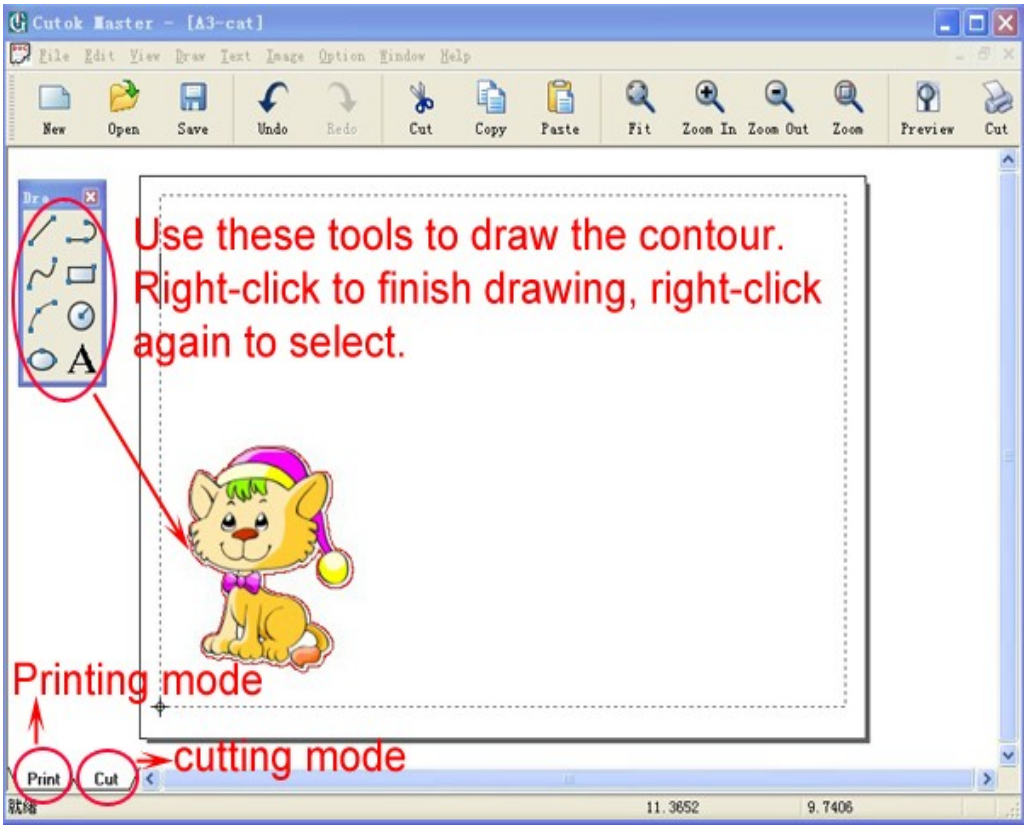

Setup - CUTOK Master
Ready to Install
Setup is now ready to begin installing CUTOK Master on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\CUTOK Master
Start Menu folder:
CUTOK Master
Additional tasks:
Additional icons:
Create a desktop icon
< Back
Install
Cancel

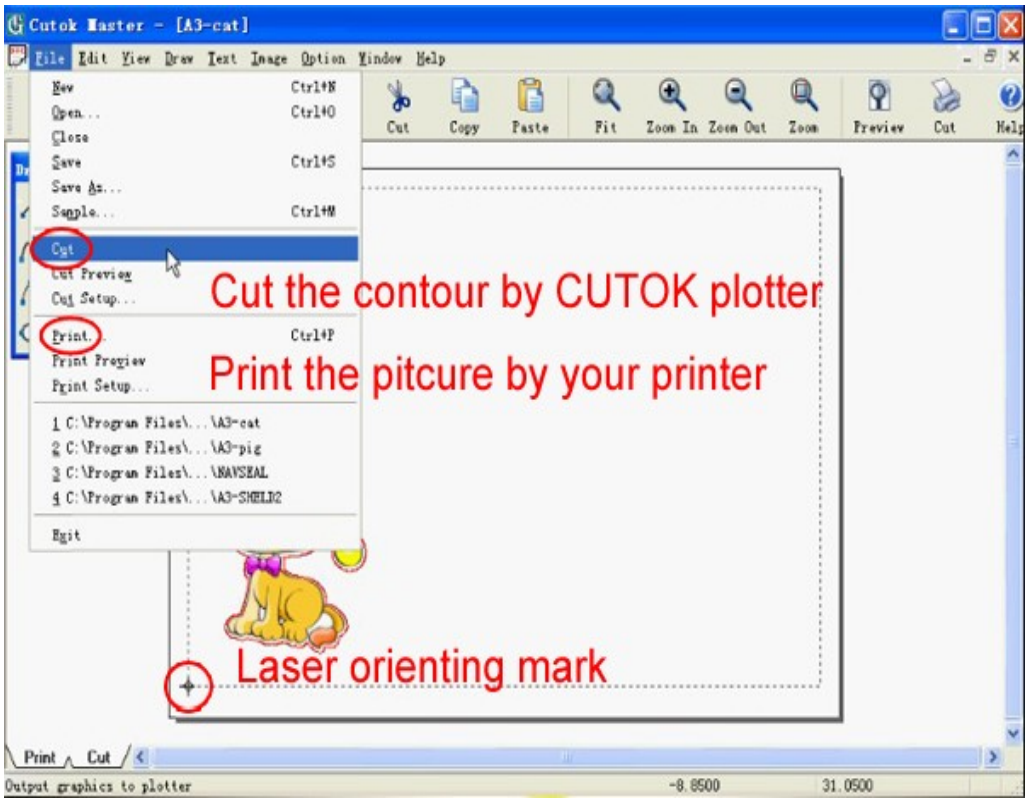
Setup - CUTOK Master
Completing the CUTOK Master Setup Wizard
Setup has finished installing CUTOK Master on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch CUTOK Master
Finish


Cutok Master - [Cutok1]
File Edit View Draw Text Image Option Window Help
New Open Save Undo Redo Cut Copy Paste Fit Zoom In Zoom Out Zoom Preview Cut Help
Draw ...
Print Cut
Ready
-17.5232
31.1252


Cutok Master - [A3-cat]
File Edit View Draw Text Image Option Window Help
New Ctrl+N
Open... Ctrl+O
Close
Save Ctrl+S
Save As...
Sample... Ctrl+M
Cut
Cut Preview
Cut Setup...
Print... Ctrl+P
Print Preview
Print Setup...
1 A3-cat
2 A3-pig
3 NAVSEAL
4 A3-SHELD2
Exit
Undo Redo Cut Copy Paste Fit Zoom In Zoom Out Zoom Preview Cut
If DXF or PLT file,you can open it from here
Print Cut
Open an existing document
7.3870
31.0559


Cutok Master - [A3-cat]
File Edit View Draw Text Image Option Window Help
New Open Save
Load...
Flip
Rotate
Select Source...
Acquire...
Copy Paste Fit Zoom In Zoom Out Zoom Preview Cut
If BMP or JPG file,import it from here
Print Cut
Load the image to document
9.9783
31.1270


Cutok Master - [A3-cat]
File Edit View Draw Text Image Option Window Help
New
Open
Save
Undo
Redo
Cut
Copy
Paste
Fit
Zoom In
Zoom Out
Zoom
Preview
Cut
Use these tools to draw the contour.
Right-click to finish drawing, right-click again to select.
Printing mode
cutting mode
Print
Cut
11.3852
9.7406


Cutok Master - [A3-cat]
File Edit View Draw Text Image Option Window Help
New Ctrl+N
Open... Ctrl+O
Close
Save Ctrl+S
Save As...
Sample... Ctrl+M
Cut
Cut Preview
Cut Setup...
Print... Ctrl+P
Print Preview
Print Setup...
1 C:\Program Files\...\A3-cat
2 C:\Program Files\...\A3-pig
3 C:\Program Files\...\MAYSEAL
4 C:\Program Files\...\A3-SHELL2
Exit
Cut the contour by CUTOK plotter
Print the pitcure by your printer
Laser orienting mark
Print
Cut
Output graphics to plotter
-8.8500
31.0500

2.3 Connection to the power

The indicator light will appear when press the Then the carriage will move to right, the pressing wheel will turn (from front) forward and back one time. It shows that the cutter finishes restart automatically.

If the return is unsuccessful, please press the

button again.

2.4. Loading media

You could use the vinyl in roll or just a piece of A4 /A3 paper.
Steps:
① Turn on the Power
② Push the handle down
③ Put the paper in from back of the cutter.
④ Keep the paper with the Checking Line on the same line!
⑤ Up the handle, then the pressing wheel will push go down on the paper.

2.5. Useable size of material available for DC-330/DC240 model:

DC-330 model:
The material width is smaller than 330mm and bigger than 300mm.
The cutting width is smaller than 280 mm, length smaller than 2000mm.

DC-240 model:
The material width is smaller than 240mm and bigger than 210mm.
The cutting width is smaller than 190mm, length smaller than 2000mm.

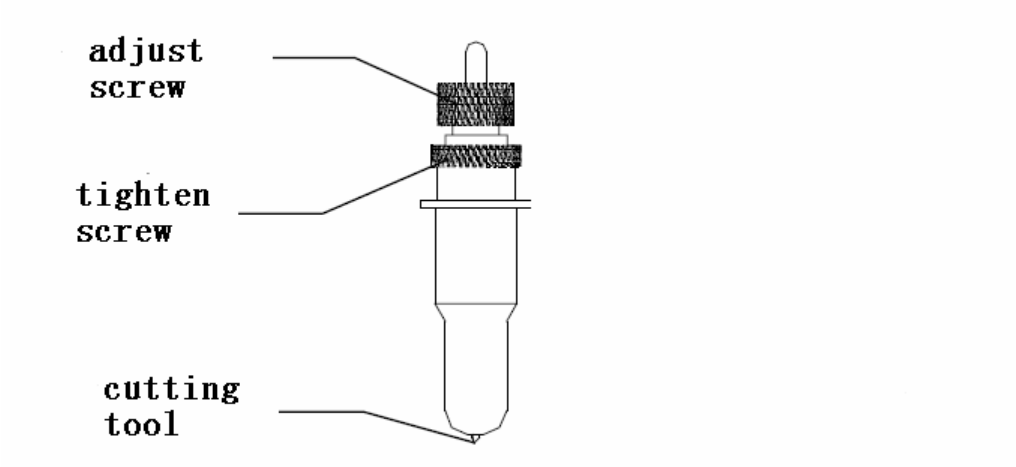
It's no limited minimum width if use the Cutting Mat.

2.6. How to use the cutting mat

To avoid the paper moving during work, it's better to use the Cutting mat when cut normal paper. And the paper should be sticking on the mat. The paper size should be smaller than the Cutting mat.

Section 3 *Blade and Drawing pen*

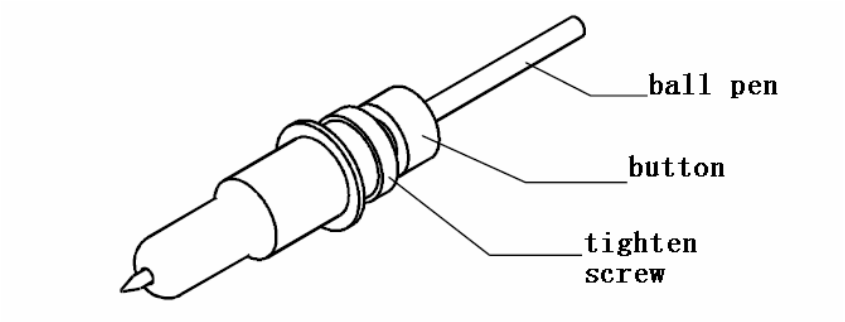
3.1. Introduction of Blade holder



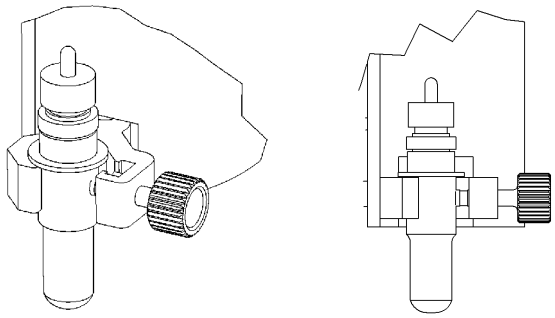
3.2. How to fix and setup the blade

A. You should keep the blade clean and don't break the blade sharp.
B. The length out of the cover should be just a little bit,about 0.2mm around over the paper thickness which you will cut !

3.3. Drawing pen holder



3.4. How to fix the blade holder or pen holder into the tool lamp



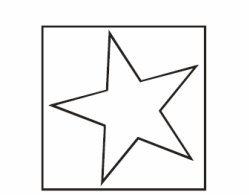
① Turn off the cutter.（It is very important）

② Loose the screw, fix the blade holder or pen holder, when the sharp of blade or the pen touch the Plastic Pressing strip, all is ok.

③ Tighten the screw in clockwise.

④ Turn on, you can see the sharp of blade or pen will rise up 2-3mm.

3.5. Testing



After fix blade (or Drawing pen) and paper well, you can try to “Testing” to check the Force and the length of the blade ok or not

Steps：

①The STATUS LED will ON when Press START PAUSE.

②Press F+ TEST button, the blade (or the pen) will draw the picture above for itself testing.

3.6 The life of Blade

The correct usage could prolong the life of blade.

① The more length the blade sharp extend out, the shorter life blade will work . So you should avoid cut through the paper.

② The more Force , the blade life will get short

③ Trying to use small Force, when the blade edge is getting less sharp, you could add the working force suitable.

④ Different brand blades will have different life.

⑤ You should change the blade when you find the old one has no tartness, to avoid affecting the work badly.

Section 4 Working

4.1. Working state manner

The mini cutter has three Working state manners:

“Working”

“Pause”

“Orientation”

STATUS LED is OFF: You can receive the data. You could change the speed and Force during working.

STATUS LED is ON: The cutter on Pause state, so you can’t receive the data.

When STATUS LED is ON

Press

the paper will move to back.

Press

the paper will move to front.

Press

to cut or draw testing picture.

Press

to Laser Orientation state. It will quit Orientation into Working state when you keep

going press 5 seconds

The“Working” state

When press

or

STATUS LED is OFF ,

The cutter will be in working state, it can receive data from computer, .

When the cutter re-starts, t he setting in default is:

A .The Force at the smallest state.

B. Cutting speed=V4, that’s 98mm/s.

4.2. Change the speed

During Working or waiting computer sending data, you could press

or

to change the speed.

The speed won't change when it arrive maximum or minimum.
The mini cutter has 7 speed levels.

mm/s

V1	V2	V3	V4	V5	V6	V7
30	60	82	98	125	200	300

4.3. Change the force

During Working or waiting computer sending data, you could

press

or

to change the Force.

The mini cutter has 7 speed levels. The Force won't change when it arrives maximum or minimum.

4.4. The" Pause"state

During Working state or at other states, it will be at Pause state when you press

, the STATUS LED is ON ,and the cutter stop working. But it won't affect receiving the data, in the same time, you can:

① Press

or

, to move the paper.

② Press

into Laser Orientation state.

③ Press

you could self testing.

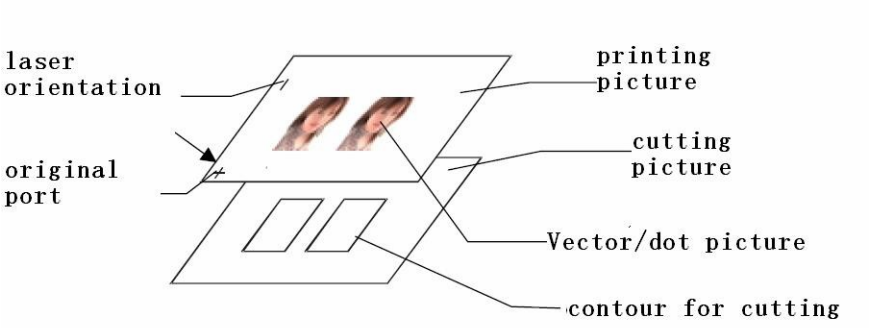
④ Press

again, the STATUS LED is OFF, the cutter resume to work.

4.5. The "Orientation" state

The STATUS LED is ON, press F-ALIGN will at laser orientation state, and if you want to quit, just keep on press F-ALIGN in 3 seconds, then the mini cutter will be at working state.

4.6. Laser Orientation cutting and contour cutting



Take CorelDraw program as example:

① Please create more than two pictures layers in CorelDraw software, and make the picture and the orientation sign at a layer, make contour in another layer.

② Send the pictures and orientation sign layer to the printer for printing.

③ press START PAUSE button, the STATUS LED will ON, then press F-ALIGN button,

now the cutter at Laser Orientation state. At this moment, the carriage will move from right to left, and will have a laser dot shoot out on the paper from right side to left, you need to move the paper by hand to check the original pot

④ Put down the handle to press on the paper, press F-ALIGN button in 5 seconds in order to quit the orientation system, and get ready to receive the data from computer.

⑤ Close the printing attribute for the image and sign in the CorelDraw software, Send the vector contour layer to the mini cutter for cutting

Note:

1.The width of the curve must be very slim.(Even 1pt still can't be output)

2.You must change the letter into curve when you want to cut letters, and make sure the curve is slim enough!

3. Different cutters will have different orientation sign, so it needs to adjust.

4.CorelDraw is not special cutting software, have no sharp compensate function, so maybe (there will) not work well at the ling corner and the seal.

Section 5 Specifications

Item	NODE 101 / CUTOK	NODE 105 / CUTOK
Configuration	Grit-rolling	
Drive system	Stepping moter	
Maximum cutting range	190X2000mm	290X2000mm
Effective sheet width	A4 size supported 8.25 inch	A3 size supported 11.75 inch
Cutting force	60g to 500g (7 levels selectable)	
Cutting speed	10 - 280 mm/s (7 levels selectable)	
No. of pens mountable	One	
Media types	Film media 0.1 mm or less in thickness Kent paper (inkjet or laser paper up to 300g/m2) Drawing paper,Postcards, Scrapbooking paper, Inkjet photo paper (Not all types of media can be cut)	
Software resolution	0.0254mm/step 1000DPI	
Motor	Stepper	
Interface	USB 2.0	
Language	DM/PL HP/GL	
Power supply	Dedicated adapter OUTPUT:DC 16V 2.5A INPUT:AC100V~240V ; 47Hz~66Hz	
Working Temperature	5 to 30 ℃	
Relative humidity	35% to 80%（Non-condensing）	
External dimensions (W x D x H)	Approx 380 x 170 x 165mm (15" x 6.7"x6.5")	Approx 470 x 170 x 165mm (18.5"x 6.7"x 6.5")
Carton dimensions (W x D x H)	Approx 470 x 360 x 270mm (18.5" x 14.2"x10.6")	Approx 590 x 360 x 270mm (23.2"x 14.2"x 10.6")
Net Weight	Approx. 4.5kg (9.9Lb)	Approx. 5.5 kg (12.1Lb)
Gross weight	Approx. 5.4kg (11.9Lb)	Approx. 6.7kg (14.8Lb)